

STS-80 to feature double deploy, retrieval

By James Hartsfield

Preparations of *Columbia* remained on target this week for a launch of STS-80 around Nov. 8, carrying the Wake Shield Facility aloft for a third flight and ORFEUS-SPAS for a second flight.

Columbia, now in Kennedy Space Center's Bay 1 shuttle hangar, is planned to be moved to the Vehicle Assembly Bldg. Monday to be hoisted vertical and joined with the STS-80 solid rockets and external tank. It is scheduled

to be moved to Launch Pad 39-B on Oct. 14.

The STS-80 crew—Commander Ken Cockrell, Pilot Kent Rominger and Mission Specialists Tammy Jernigan, Tom Jones and Story Musgrave—will travel to KSC Oct. 17 for a dress rehearsal of the launch count-down. A launch on Nov. 8 would have *Columbia* lift off at 1:47 p.m. CST.

Meanwhile, *Atlantis*, just returned from the fourth docking with the Russian Mir Space Station on STS-79, is now in KSC's Bay 3

processing hangar being readied for a fifth docking with the Mir in January 1997 on STS-81. Initial post-landing inspections of *Atlantis* revealed that it had returned to Earth in excellent condition, with only light debris damage to its thermal tiles. As technicians began inspecting the orbiter's aft compartment last weekend, a 1/16th inch Allen wrench was found on the compartment floor. The small wrench bore no discernible markings such as a serial number. An analysis is

under way to determine its origin, although the small wrench is believed to have posed absolutely no threat to *Atlantis*' operations during STS-79.

Elsewhere, *Discovery* is in the Bay 2 hangar being readied for a launch in February 1997 on STS-82, the second Hubble Space Telescope servicing mission. Current work includes the installation of the main engines next week and completing installation of the forward reaction control system module.

Quality forum to focus on past present, future

One of the men who taught Japan how to manage for quality will be the featured speaker during a live interactive satellite broadcast set for noon Thursday.

Joseph Juran, the world's leading expert on the history and practice of quality, will discuss "Quality: Yesterday, Today and Tomorrow" at noon Thursday in Teague Auditorium.

Employees who attend the seminar in Teague will have the opportunity to fax or call-in questions to Juran and a wide variety of quality experts. The two and a half hour program also will be telecast on the JSC Television Distribution System on channel 23.

In Juran's first public appearance in years, this 91-year-old quality pioneer will draw from a lifetime of experience to explore the origins of quality, today's best practices and the role of quality management in the future.

The seminar will begin at noon with opening remarks from Juran and Blanton Godfrey, chairman of the Juran Institute. Several experts will discuss the history of quality. At 12:45 p.m. the discussion will focus on quality today and at 1:35 p.m. the discussion will turn to quality in the future. Each topic will include round table discussions, viewer call-ins and quality minutes.

Juran will be joined by a diverse and engaging panel of experts that includes: Robert Galvin, chairman of the executive committee at Motorola; Yoshinao Nakada, technical manager of competitive analysis and reverse engineering at Bell Laboratories; Ron Kenett of Kenett-Preminger Associates; Ludmila Konareva, a senior researcher at the Russian Academy of Sciences; Lisa Joronen, chairman of Sol Ltd.; Frank Pipp, president of the Diversified Business Group at Xerox Corp.; and Curt Reimann, senior scientist at the National Institute of Standards and Technology.

For more information call Gloria Stiner at x41607.

Fun run to end safety, health day activities

The closing event at this year's Safety and Total Health Day will be a fun run/walk at 3:30 p.m. Oct. 23 at the Gilruth Center.

Employees are welcome to participate—walking, running, biking or rollerblading—in this non-competitive event along the JSC jogging trail or around the mall pond. A registration fee of \$5 is required for a T-shirt, and should be in by close of business Wednesday to guarantee a shirt on race day. Late registration will end at 2 p.m. the day of the event.

Prizes will be given, including an audio walk/jog tape to the first 500 registrants. All registered participants also will be eligible for prizes by random drawing at the refreshment station near the finish line. Plenty of fresh fruit, bagels, energy food and cold drinks also will be available. Those who choose to rollerblade or ride a bike will begin first and must wear a helmet.

For more information contact Larry Wier, event director, at x30301.



NASA Photo

The newest Mir 22 crew member, Cosmonaut Researcher John Blaha, right, and Mir 22 Commander Valery Korzun share a meal on *Atlantis*' middeck during docked operations with STS-79 crew members.

Blaha settles in on station

(Continued from Page 1)

different from the simulators I trained in, so at first I was a little concerned about that. But Valery (Korzun) and Sasha (Alexander Kaleri), my two Russian crewmates, as well as Shannon, who's spent six months here, have really helped me out in the last three days. I had a great night's sleep and I feel very good on the Mir."

Blaha initiated the Biotechnology System activities shortly after undocking, using a rotating vessel to suspend cells in a low gravity, stationary environment. The experiment will use cartilage cells to investigate long-term on-orbit cell growth in the microgravity environment of space. At various times during his mission, Blaha will sample and analyze cellular environment for post-flight analysis.

Blaha also fixed several more plants for the Greenhouse Experiment. These dwarf wheat plants will allow investigators to study the effects of space on plant growth, reproduction and metabolism, as well as chemical

and structural changes. Blaha has reported that the heads of the plants are maturing.

In the area of Human Life Sciences, Blaha has taken several measurements that will



allow researchers to assess the changes in muscle mass during the course of his stay on Mir. The measurements will be compared to those taken before and after his mission to help quantify the extent of the changes his body will undergo while on Mir and assess how quickly his body returns to its pre-flight condition after returning to Earth.

Blaha is scheduled to remain aboard Mir until January with his Mir 22 crewmates, performing a variety of experiments across six disciplines: Advanced Technology, Earth Sciences, International Space Station Risk Mitigation, Fundamental Biology, Human Life Sciences and Microgravity Sciences. The research, begun by Lucid and continuing under Blaha, will advance the science knowledge base to the benefit of all people on Earth.

STS-79 crew to recap mission Thursday

(Continued from Page 1)

it brings," he said. "Now it's a part of our lives, thanks to this crew and others like them.

"I appreciate the work that is done here by all of you at NASA," Clinton added. "I thank everyone that works for America's space program for a job well done. This is all of your triumph here and America is very proud of you."

The president said the mission was an important tool in America's foreign policy and its efforts to encourage international peace.

"The mission from which Dr. Lucid returns continues to cement the close and growing bonds of cooperation between the United States' and the Russian's space programs, something that we have worked very hard for," Clinton added. "Not only the cooperation between our nation and Russia, but between our nation and other nations as well in the space station project. We are committed to continuing the strong U.S. space program."

After the president departed, Readdy commended his crew for a perfect mission.

"I could not be prouder of the crew that is up here today," Readdy said. "This crew and you all form an incredible team of professionals that made a very, very complicated 10-day mission come off seamlessly and achieve more than 100 percent of our mission objectives. My hat's off to all of you."

Wilcutt praised the training team and its tireless efforts to prepare for STS-79. "Thank you especially our training team who worked all the hours with us whenever we had a late simulation, they were right there with us," he said.

Apt praised the entire team at JSC. "We had

a flight that was really two flights rolled into one," Apt said. "There was enough work for any two flights and the fact that we got it done is a tribute to the entire team here at JSC. We couldn't possibly done it without the dedication and professionalism of everybody down here that is part of the team."

Akers also praised the JSC team. "Everybody here knows it takes a whole team to make a successful space mission, this great crew who is here, John, our two cosmonauts, and more importantly all you folks who did all the work ahead of time and during the mission back here on the ground. We are going to do our very best to come by personally and thank you in the coming days."

Walz reflected about his time on Mir. "John looked at me as said you know Carl, this is the kind of mission that we're going to be flying in the year 2002 with the International Space Station. This mission is a prototype for future crew transfer, logistics transfer and a whole bunch of science all wrapped up into one."

Lucid stood at the lectern last to reflect on her homecoming. "I want to say thank you to everybody that supported the mission here on the ground. It was a great mission, it was a great adventure and I thoroughly enjoyed it. The reason why it worked was due to all the people that worked so hard to make it great."

The crew, including Lucid, will recap the fourth shuttle/Mir docking at 3 p.m. Thursday in Teague Auditorium. Employees are encouraged to invite family and friends. In addition, "Welcome Home Shannon" T-Shirts are available at the Exchange Store in Bldg. 11.

Singers to perform for Hispanic Heritage

In celebration of National Hispanic Heritage Month, the Equal Opportunity Programs Office will host "The Family Singers" from 11:30 a.m.-12:30 p.m. Tuesday in the Bldg. 3 cafeteria.

National Hispanic Heritage Month runs from Sept. 15-Oct. 15. The Family Singers will perform traditional, popular songs and their own musical compositions for the event. For more information on National Hispanic Heritage Month, including highlights of some of the achievements of Hispanics at NASA, reference the following URL: <http://www.jsc.nasa.gov/pao/events/hispanic/hispanic.html>

JSC seeks employee input for Inspection Day

JSC needs employees to identify associates at local technical businesses who can benefit from an "up-close" look at more than 100 exhibits and programs during JSC's Inspection Day.

JSC will open its doors on Nov. 13 and 14 to business leaders and technical representatives from outside the NASA/aerospace community to learn more about the center's missions, facilities and technologies. A major effort is under way to identify the appropriate attendees who will benefit from this event.

Employees may submit their recommendations by Oct. 13 to the JSC Inspection Day logistics center at x47853. A special Internet site has also been established at <http://www.jsc.nasa.gov/seejsc>

JSC adds new ATM on site

The JSC Credit Union recently added a third Automated Teller Machine on site for employees.

ATMs are now available in Bldgs. 1, 3 and 11. The new ATM in Bldg. 1 is located across from the Travel Funding Desk and the Cashiers Office on the first floor.

"The new ATM machine was installed to provide JSC travelers with quick access to an ATM machine for acquiring travel advances using the American Express Government Card," said Deputy Chief Financial Officer for Finance John Beal. "After picking up approved travel orders and airline tickets, JSC travelers can conveniently receive the necessary cash advance for their official travel from the ATM machine."

New contract will reward for shuttle cost savings

(Continued from Page 1)

technologies and inspiration to children, adults and the economic sector of America," Goldin said. "It frees our people from managing contracts and to getting back to being on the cutting edge of technology."

The new single prime contract, called the Space Flight Operations Contract, replaces 12 previous individual contracts, the largest two of which had covered shuttle ground processing work and shuttle operations.

"We are very honored at USA to play this roll in taking America's human space program forward into the future," said Kent Black, chief executive officer at USA. "We are absolutely dedicated to maintaining safety first, meeting the manifest and then reducing the cost. I'd like to believe we are paving the way for others to follow, bringing the efficiencies of the private sector into what had been traditionally government roles and allow NASA to do what they do best which is to pursue new frontiers in space for our nation."

This is the first phase of the SFOC, and its content includes preparatory work for operation of the International Space Station as well as the shuttle. A second phase that may be negotiated could include another 16 contracts covering the supply of shuttle components.

The Phase I contract includes a unique incentive that rewards USA for cost savings. The incentive allows the contractor to retain 35 percent of any cost savings, while 65 percent of the savings go back to the government. Conversely, the contractor will be penalized in a similar fashion for any cost overrun.

"We have set this up so that the contractor has every possibility to succeed, but we are giving them the right to fail," Goldin added.

To ensure safety is maintained, the transition of responsibilities from NASA to USA for day-to-day operations will be performed on a highly structured, job-by-job basis, taking into account the criticality levels and complexity of tasks and equipment involved.

"Today is the first day of a new space program in America," Goldin said. "We are opening up the space program to commercial space involving humans. May it survive and get stronger."